

PATIENT-SPECIFIC DOSIMETRY**ABSTRACT OF THE DISCLOSURE**

A patient-specific optimally effective radiation dose for administration of a radiopharmaceutical to a patient for treatment of a disease may be established by basing the calculation of the appropriate therapeutic dose on factors such as the desired total body dose, the maximum tolerated dose, the typical clearance profile of the radiopharmaceutical, the patient's mass or maximum effective mass, and the patient-specific residence time of the radiopharmaceutical or an analog in the whole body of the patient. The use of the method allows for treatment of a patient with an appropriate dose which is maximally effective against the disease yet minimally toxic. The determination of a patient-specific therapeutic dose may be assisted by the use of a software program set to the particular parameters of the radiopharmaceutical.